

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A fuel supply for a fuel cell comprising:
an outer casing containing fuel, and
an information storage device supported by the casing, said information storage device stores encrypted data that is readable by a controller capable of decoding the encrypted data, wherein said data is encrypted by a manufacturer of the fuel supply.
2. (Original) The fuel supply of claim 1, wherein the data is encrypted and can be decoded by a symmetric-key technique.
3. (Original) The fuel supply of claim 1, wherein the data is encrypted and can be decoded by a public-key technique.
4. (Original) The fuel supply of claim 1, wherein the fuel supply is a fuel cartridge.
5. (Original) The fuel supply of claim 1, wherein the fuel is contained in a liner and the liner is disposed inside the outer casing.
6. (Original) The fuel supply of claim 1, wherein the information storage device comprises an electrically erasable programmable read-only memory.
7. (Previously Presented) The fuel supply of claim 1, wherein the encrypted data is selected from the group consisting of type of cartridge, date the cartridge was manufactured, lot number for the cartridge, sequential identification number assigned to the cartridge, date the information storage device was manufactured, lot number for the information storage device, sequential identification number assigned to the information storage device, machine identification number for the cartridge and/or storage device, shift during which the cartridge and/or storage device were produced, country where the cartridge and/or storage device were produced, facility code

identifying the factory where the cartridge and/or storage device were produced, vibration tolerance for the cartridge and other limits for operating parameter, materials used in manufacturing anti-counterfeit information, fuel information, intellectual property information, safety information, security password, expiration date, shut-down sequence, hot swap procedure, recycling information, reactant information, fuel gage type, fluid sensor information, current fuel level, current ion level in the fuel, number of separations of the cartridge from the fuel cell, number of times that the cartridge was refilled, fuel level on separation of the cartridge from the fuel cell, number of insertions/connections of the cartridge to the fuel cell, fluid level on connection of the cartridge to the fuel cell, maintenance information, marketing information, triggering events, efficiency of the fuel cell and operational history of the fuel cell system.

8. (Currently Amended) A fuel supply for a fuel cell comprising:

an outer casing containing a fuel, and

an information storage device supported by the casing, said information storage device stores data selected from the group of information consisting of ~~current ion level in the fuel, vibration tolerance for the cartridge, anti-counterfeit information, intellectual property information, security password, expiration date, a~~ shut-down sequence, and hot swap procedure, ~~fuel gage type, and fluid sensor information,~~

wherein the group of information is readable by a controller.

9. (Original) The fuel supply of claim 8, wherein the information storage device comprises an electrically erasable programmable read-only memory.

10. (Original) The fuel supply of claim 9, wherein the group of information is stored on a non-erasable portion of the electrically erasable programmable read-only memory.

11. (Original) The fuel supply of claim 8, wherein the controller is located in the fuel cell.

12. (Original) The fuel supply of claim 8, wherein the controller is located in an electronic

device that the fuel cell powers.

13. (Original) The fuel supply of claim 8, wherein the controller is connected to the information storage device by electrical connections.

14. (Original) The fuel supply of claim 8, wherein the controller is connected to the information storage device by wireless connections.

15. (Original) The fuel supply of claim 8, wherein the fuel supply comprises a fuel cartridge.

16. (Original) The fuel supply of claim 8, wherein the fuel is contained in a liner and the liner is positioned inside the outer casing.

17-18 (Canceled)

19. (Original) The fuel supply of claim 8, wherein the fuel supply is connectable to a pump.

20. (Original) The fuel supply of claim 19, wherein the pump is located inside the fuel cell.

Claims 21-102 (Canceled)

103. (New) The fuel supply of claim 8, wherein the information storage device is located in the fuel cell.

104. (New) The fuel supply of claim 8, wherein the information storage device is located in an electronic device that the fuel cell powers.

105. (New) The fuel supply of claim 8, wherein the hot swap procedure comprises instructions for a controller accessing the information storage device to switch to an alternate power source

for an electronic device that the fuel cell powers and to instruct a pump for pumping fuel to the fuel cell to shut down in accordance to a predetermined sequence when a trigger event occurs.

106. (New) The fuel supply of claim 105, wherein the trigger event comprises a removal of a fuel supply containing said fuel for the fuel cell when the electronic device is operational.

107. (New) The fuel supply of claim 105, wherein the alternate power source comprises a battery.

108. (New) The fuel supply of claim 105, wherein the alternate power source comprises a reserve fuel chamber containing fuel for the fuel cell.

109. (New) The fuel supply of claim 105, wherein while using the alternate power the controller writes information to the information storage device.

110. (New) The fuel supply of claim 105, wherein the predetermined sequence comprises running the pump using the alternate power source to pump fuel away from an interface between the fuel cell and a fuel supply containing fuel for the fuel cell.

111. (New) The fuel supply of claim 8, wherein the hot swap procedure comprises semaphore.“lock” and semaphore.“unlock” verbs.